In the Claims:

1. (TWICE AMENDED) A photometric measurement flow cell comprising:

a cell body having a first end and a second end;

a fluidic channel allowing the passage of fluids, contain within said cell body;

an element holder contained within said first end of said cell body wherein said element holder has a substantially planar sealing surface for receiving an element;

a stepped element having a stem and a base, said stem having an end surface protruding into said fluidic channel creating a fluidic measurement pathlength and said base having a substantially planar sealing surface, a length of said stem being selected to increase or decrease

said fluidic measurement pathlength;

said stepped element contained within said element holder and sealed within said cell body by a sealing gasket positioned between said substantially planar sealing surface of said stepped element and said substantially planar sealing surface of said cell body whereupon pressure exerted against said substantially planar sealing surface of said stepped element and said substantially planar sealing surface of said stepped element to be reliably sealed within said cell body.